Editor's note: Appealed -- aff'd, Civ.No. 84-3059 (D.D.C. Sept. 25 1986)

QUADRA GEOTHERMAL, INC., ET AL.

IBLA 84-71, 84-72, 84-86, 84-87,
84-96, 84-97, 84-98, 84-120,
84-174, 84-188 Decided August 16, 1984

Appeals from decisions of California State Office, Bureau of Land Management, rejecting noncompetitive geothermal resources lease applications in whole or in part. CA-14290, et al.

Affirmed.

1. Geothermal Leases: Known Geothermal Resources Area -- Geothermal Leases: Noncompetitive Leases

BLM must reject noncompetitive geothermal resources lease applications where the land sought is determined to be within a known geothermal resources area at any time prior to the issuance of a lease. Applicants have presented unsubstantiated allegations that BLM discriminated against the applicants by improperly delaying the processing of their applications until the determination was made but have not rebutted the determination, which was based on the convergence of geologic, geophysical, and exploration well data, by a preponderance of the evidence.

APPEARANCES: Owen Olpin, Esq., John W. Stamper, Esq., and Charles C. Lifland, Esq., Los Angeles, California, and Jerome C. Muys, Esq., and John F. Shepherd, Esq., Washington, D.C., for appellant Quadra Geothermal, Inc.; Eugene V. Ciancanelli, pro se; Philip H. Essner and Kenneth P. Nemzer, Esq., Santa Rosa, California, for appellant Caithness Corporation; Philip H. Essner, Santa Rosa, California, for appellant California Energy Co., Inc.; Robert B. Bunn, pro se; Gina V. Gillette, pro se; Alexander C. McGilvray, pro se; Robert B. Davis and Edward S. Davis, pro sese; W. J. Lucas, Dallas, Texas, for appellant Thomas M. Hunt; Lynn M. Cox, Esq., Office of the Regional Solicitor, U.S. Department of the Interior, Sacramento, California, for the Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE MULLEN

Quadra Geothermal, Inc. (Quadra), et al., have appealed from various decisions of the California State Office, Bureau of Land Management (BLM), rejecting noncompetitive geothermal resources lease applications in whole or in part because the land is situated in an extension to the Glass Mountain

known geothermal resources area (KGRA) or has already been leased. 1/ The lease applications were filed for acquired and public domain land situated in Modoc and Siskiyou Counties, California, within the Medicine Lake Highlands, pursuant to section 4 of the Geothermal Steam Act of 1970, 30 U.S.C. § 1003 (1982). BLM rejected 66 pending noncompetitive lease applications in whole or in part because the land described in the applications had subsequently been determined to be within an extension of the Glass Mountain KGRA, designated effective August 3, 1983. Lands within a known geothermal resources area may be leased only through competitive bidding. See 48 FR 40796 (Sept. 9, 1983), as amended at 48 FR 43737 (Sept. 26, 1983). Ten appellants have appealed BLM's rejection of 38 of these applications.

Before we consider the substantive issues there are certain procedural questions which should be addressed. On December 6, 1983, BLM filed a motion to dismiss the appeal of Quadra docketed as IBLA 84-174 2/ contending that appellant Quadra lacks standing to bring an appeal pursuant to 43 CFR 4.410, which extends the right to appeal to any party to a case who is "adversely affected" by a BLM decision. BLM notes that the record does not identify Quadra as a party in interest and that Quadra has not "filed an application for approval of an assignment of a portion or all of Alaskan Geothermal, Inc.'s [Alaskan] interest in any of the leases." 3/ In opposition to BLM's motion to dismiss, Quadra contends that it has standing to appeal by virtue of its status as "designated agent" of Alaskan. As a further basis Quadra notes that its corporate predecessor in interest, Canada Northwest Oils, Inc. (CNO), is a party in interest by virtue of an agreement with Alaskan to assign an 8 percent working interest in each of the leases to CNO. 4/ Quadra

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1/ By order dated Dec. 15, 1983, the Board granted a motion by BLM to consolidate all of the appeals involved herein, except that appeal docketed as IBLA 84-188, because of the substantial similarity of the legal and factual issues. For that same reason, we hereby, sua sponte, consolidate the latter appeal. Appendix A constitutes a list of the various appellants, the geothermal resources lease applications, the dates the applications were filed, the dates of the BLM decisions, and the affected acreage. On Apr. 27, 1984, Quadra withdrew its appeal with respect to lease application CA-14290.

2/ The motion is with respect to six of the geothermal resources lease applications which are the subject of the appeal docketed as IBLA 84-174. The six applications are CA-2150, CA-3084, CA-3086, CA-2156, CA-2139, and CA-2136.

3/ The record indicates that all of the lease applications involved in IBLA 84-174 were originally filed by California Geothermal, Inc. By decision dated Sept. 24, 1982, BLM officially recognized the change of the applicant's corporate name to Alaskan Geothermal, Inc. Moreover, IBLA 84-174 involves 19 lease applications, only 6 of which were the subject of BLM's motion to dismiss. The distinguishing factor, as Quadra points out, appears to be that, with respect to the other 13 applications, Quadra had joined with other potential assignees in submitting requests for BLM's approval of the assignment of the record title interest of Alaskan in the anticipated leases. In the case of each of the six lease applications, Quadra had submitted no such request.

4/ Attached to each of the six lease applications was a statement by California Geothermal, Inc., that it had entered into an agreement to

states that CNO changed its name to Quadra Oil and Gas, Inc., and formed a wholly owned subsidiary, Quadra Geothermal, Inc. These facts are documented in two decisions by the Oregon State Office, BLM, dated March 17, 1983, which noted acceptance of the qualifications of Quadra Oil and Gas and Quadra Geothermal to hold geothermal resources leases. See Quadra's Exhs. 6 and 7. BLM has not challenged the evidence submitted by Quadra.

Based on this evidence and the case record, we conclude that Quadra has standing to appeal. Quadra should be considered a party adversely affected by a BLM decision. It is the wholly owned subsidiary of the successor in interest to an 8 percent working interest in any potential geothermal resources lease resulting from the applications filed by Alaskan. See Geosearch, Inc., 64 IBLA 149 (1982). Quadra has demonstrated a "legally recognizable 'interest,'" sufficient to confer standing. In re Pacific Coast Molybdenum Co., 68 IBLA 325, 331 (1982). Moreover, it is sufficient that there was an outstanding agreement to assign that working interest, regardless of whether a request for approval of the assignment had been filed with BLM, because the agreement to assign was binding between the parties. Petrol Resources Corp., 65 IBLA 104, 107 (1982). BLM's motion to dismiss for lack of standing is denied.

On January 16, 1984, BLM filed a motion to dismiss the appeal of Thomas M. Hunt (Hunt) docketed as IBLA 84-188 because Hunt failed to properly serve the Regional Solicitor with a copy of his notice of appeal in ac cordance with 43 CFR 4.413 and because Joe Lucas, the person who filed the appeal, is not qualified to practice before the Department. The applicable regulation on service, 43 CFR 4.413, provides that within 15 days of filing a notice of appeal, an appellant must serve a copy on the Regional or Field Solicitor. Failure to serve within the required time "subject[s]" the appeal to summary dismissal. Id. The record indicates that Hunt's notice of appeal filed December 2, 1983, was not served on the Solicitor. However, in its answer at page 2 note 2, BLM states that sometime after December 6, 1983, the Regional Solicitor received a copy of the notice of appeal. Moreover, the answer itself constitutes a response by BLM to the contentions raised by Hunt and the other appellants. In view of the Solicitor's receipt of Hunt's notice of appeal and the lack of any prejudice to the Solicitor in preparing its response to the appeal, we decline to invoke summary dismissal. Defenders of Wildlife, 79 IBLA 62 (1984); cf. Tagala v. Gorsuch, 411 F.2d 589 (9th Cir. 1969).

The applicable regulation regarding who may practice before the Department is found at 43 CFR 1.3. Failure to be represented by a qualified person also subjects an appeal to summary dismissal. Robert N. Caldwell, 79 IBLA 141 (1984). The record does not specifically state the relationship between Lucas and Hunt. However, the record indicates that Lucas, who filed the notice of appeal is an employee of Hunt Energy Corporation (Hunt Energy). The record contains a letter dated February 23, 1983, signed by Lucas on

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fn. 4 (continued)
assign various working interests to certain named parties upon issuance of the lease and subject to the approval of BLM. The statement indicated that the lease applicant had agreed to assign an 8 percent working interest to Canada Northwest Oils, Inc., of Billings, Montana.

behalf of Hunt Energy. In addition, the October 1983 BLM decision is addressed to Hunt at the same address as the corporation. In the statement of reasons filed on Hunt's behalf, Lucas is identified as a "Regional Land Coordinator." We conclude that the record is sufficient to establish that Lucas is an employee of Hunt and, thus, entitled to practice before the Department on that basis. See 43 CFR 1.3(b)(3). BLM's motion to dismiss is denied. Andrew McCulloch, Esq., subsequently appeared on behalf of Hunt.

[1] We turn, therefore, to the substantive questions raised by appellants. The leasing of Federal geothermal resources is governed by the Geothermal Steam Act of 1970 (Act), 30 U.S.C. §§ 1001-1025 (1982), and its implementing regulations. Section 4 of the Act, supra, provides that lands within a KGRA "shall be leased * * * by competitive bidding." In contrast, lands not included in a KGRA are leased to the first-qualified applicant. Id. A KGRA is defined as

> an area in which the geology, nearby discoveries, competitive interests, or other indicia would, in the opinion of the Secretary, engender a belief in men who are experienced in the subject matter that the prospects for extraction of geothermal steam or associated geothermal resources are good enough to warrant expenditures of money for that purpose.

30 U.S.C. § 1001(e) (1982).

In its statement of reasons for appeal (IBLA 84-71 and IBLA 84-174), Quadra contends that the extension of the Glass Mountain KGRA was not properly designated and that Alaskan was discriminated against by BLM's failure to issue noncompetitive geothermal resources leases. 5/ Quadra asserts that BLM engaged in a pattern of actions designed to deny Alaskan the benefit of noncompetitive leases prior to an extension of the Glass Mountain KGRA, to the benefit of Union Oil Company (Union Oil) and other major oil companies.

Quadra argues that BLM improperly delayed processing Alaskan's lease applications until after designation of the KGRA extension. As an illustration of what it believes to be disparate treatment Quadra notes that, as of November 1983, Union Oil and Phillips Petroleum had each received 100 percent and Stewart Capital Group had received 85 percent of the noncompetitive leases they had applied for within the lands subsequently included in the KGRA extension. In contrast, Alaskan had received only 19.05 percent of the noncompetitive leases it had applied for, "despite the fact that it was one of the earliest applicants and made constant efforts to obtain its leases from BLM" (Statement of Reasons (SOR) at 33). With one exception, 6/

5/ The statements of reasons filed by Eugene V. Ciancanelli (IBLA 84-72), Robert B. Bunn (IBLA 84-96), Gina V. Gillette (IBLA 84-97), A. C. McGilvray (IBLA 84-98), and Robert B. and Edward S. Davis Adopted and incorporated by reference the statements of reasons filed by Quadra Geothermal (IBLA 84-71 and 84-174) and California Energy (IBLA 84-87), but gave no further statement of reasons. Therefore, reference to Quadra and/or California Geothermal are also references to these parties to the extent applicable. 6/ The exception was application CA-14240 filed on July 1, 1983. As previously noted, Quadra withdrew its appeal with respect to this lease.

Alaskan's lease applications had been filed in June 1974 and 1975. Quadra also notes that within the KGRA extension BLM issued leases "covering 90% of the available acreage" other than acreage applied for by Alaskan. Id. at 4. Quadra notes that Alaskan only received four noncompetitive leases within land subsequently designated as part of the KGRA extension.

For the 19 lease applications filed by Alaskan which remain the subject of Quadra's appeal, BLM issued notices of intention to award the leases on August 17 and 27, 1982. These notices of intention to award leases informed Alaskan that offers to lease would be made by BLM on February 21 and March 1, 1983, "unless advised that the applicant wishes the lease offer prior to that time." The notice also stated that: "Noncompetitive lease applicants are cautioned that during this interim, all or part of the lands included in this lease offer may be included in a Known Geothermal Resource Area resulting from exploration on adjoining land thereby precluding leasing noncompetitively." Quadra states that between late April and early July 1983, BLM transmitted noncompetitive leases for Alaskan's signature with respect to 13 of the 19 lease applications. These documents were duly executed and returned to BLM on June 21 and July 27, 1983. However, the leases were not executed by BLM and were subsequently rejected in whole or in part when the affected land was determined to be within a KGRA extension in August 1983.

Quadra contends that the KGRA determination was prompted by a May 1983 request by Union Oil to expand its unit area and that the determination was designed to create a buffer zone around the unit area. It is Quadra's position that this designation resulted in the rejection of the noncompetitive lease applications of "smaller companies" thereby offering larger companies an opportunity to bid on adjacent land "should their operations within the unit area itself indicate that expansion would be to their benefit" (SOR at 28).

Quadra further argues that this pattern of discrimination only serves to discourage smaller companies from identifying new areas for geothermal resources exploration and leads to the monopolization of geothermal resources, contrary to the intention of the Act. Quadra concludes that Alaskan's lease applications were "deliberately processed so as to deny [Alaskan] the benefit of a determination made reasonably and seasonably" (i.e., to issue noncompetitive leases), citing Schraier v. Hickel, 419 F.2d 663, 667 n.12 (D.C. Cir. 1969).

We note at the outset that, even if we were to conclude that BLM manipulated the process of issuing noncompetitive geothermal resources leases to land subsequently designated as within the extension of the Glass Mountain KGRA, so as to favor certain companies, when land has been properly determined to be within a KGRA, the noncompetitive lease applications are properly rejected. Nancy J. Moffitt (On Reconsideration), 31 IBLA 191 (1977); see also Bob F. Abernathy, 71 IBLA 149 (1983). In accordance with 30 U.S.C. § 1003 (1982) lands within a KGRA may only be leased by competitive bidding and a noncompetitive lease application for such lands must be rejected. Renewable Energy, Inc., 67 IBLA 304, 89 I.D. 496 (1982); Anadarko Production Co., 24 IBLA 132 (1976). Moreover, in Hydrothermal Energy & Minerals, Inc., 18 IBLA 393, 82 I.D. 60 (1975), we held that BLM must reject a noncompetitive lease application where the KGRA determination is made after an application

has been filed if the determination is made prior to issuance of the lease. See 43 CFR 3210.4; cf. McDade v. Morton, 353 F. Supp. 1006 (D.C.C. 1973), aff'd, 494 F.2d 1156 (D.C. Cir. 1974).

In a supplemental statement of reasons and response to BLM's answer to its supplemental statement of reasons, Quadra contends that BLM effectively issued noncompetitive geothermal resources leases to Alaskan prior to the KGRA extension, which leases cannot now be repudiated. Quadra argues that the notices of intention to award leases contractually bound BLM to make lease offers to Alaskan, by certain dates, i.e., February 21 and March 1, 1983, thereby "eliminating its discretion to refuse to issue the leases" (Supp. SOR at 4). Quadra states that the only contingency on BLM's commitment was that the land not be included within a KGRA within the stated time period and that this contingency did not occur. In the alternative, Quadra argues that the 13 lease "offers" made by BLM between April and June 1983, when accepted and signed by Alaskan, "ripened into leases at that time." Id. at 6. Quadra contends that the leases issued at the time Alaskan signed the offers, regardless of the fact that they had not been executed by BLM, and that nothing in the Departmental regulations requires execution by BLM in order to make a geothermal resources lease effective. 7/ Quadra also contends that fairness dictates that BLM should issue the leases because notices of intention to award leases induce applicants to relinquish other leases in order to comply with limitations on acreage holdings, citing United States v. Georgia-Pacific Co., 421 F.2d 92 (9th Cir. 1970), which involves the doctrine of equitable estoppel.

Quadra is incorrect in its contention that issuance of notices of intent to award leases contractually bound BLM to issue leases. These notices were intended to give the applicant time to comply with applicable acreage limitations and specifically stated that no lease would issue if the land were later included within a KGRA. Indeed, BLM would violate these statutory limitations if it contractually bound itself to issue a lease prior to compliance. BLM retains the authority to reject lease applications up until the time a lease is issued. Moreover, we cannot construe a statement by BLM, however strongly worded, as constituting an absolute and binding contract between BLM and the lease applicant to issue a lease. See Robert W. Myers, 63 IBLA 100 (1982).

A lease did not issue in those cases where Alaskan signed the lease "offers." The applicable regulations clearly provide that a geothermal resources lease is not effective until executed by BLM. 43 CFR 3202.1-1 provides that geothermal leases generally "will be dated as of the first day of the month following the date on which the leases are signed on behalf of the lessor." (Emphasis added.) 8/ In addition, 43 CFR 3210.2-3 provides

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7/ This argument is contrary to the admission in its statement of reasons that Quadra "recognizes that an applicant for a noncompetitive lease ordinarily has no vested rights in the lease itself until after its execution by the Government, and the legitimate extension of a KGRA may, therefore, operate to extinguish the rights of the holders of pending noncompetitive lease applications" (SOR at 32).

8/ The United States is not bound by the acts of its officers or agents when they enter into an agreement to do or cause to be done what the law does not sanction or permit. 43 CFR 1810.3(b).

that a lease application may not be withdrawn "unless the request is received by the proper BLM office before the lease * * * has been signed on behalf of the United States." As in the case of noncompetitive oil and gas leases, the offer to lease is made by the applicant, which, when accepted by BLM, constitutes issuance of the lease.

Appellants contend that the issuance of the notices of intent to lease the lands created a binding contract regardless of the fact that the leases were not subsequently executed. In doing so, they rely on the Supreme Court determination in United States v. Purcell Envelope Co., 249 U.S. 313 (1919). There is an important fact in this case which clearly differentiates the facts in this case from those in Purcell. In the notice of intent sent by BLM, a statement was made that the form used to send the notice to appellants contained the following statement: "Noncompetitive lease applicants are cautioned that during this interim, all or part of the lands included in this lease offer may be included in a Known Geothermal Resource Area resulting from exploration on adjoining land thereby precluding leasing noncompetitively." Therefore, unlike Purcell, appellants were put on notice that prior to the issuance of the lease a final KGRA determination would be made and that, if the noncompetitive lease applications were found to be for lands within a KGRA, the lease applications would be rejected. A discussion of the process for determination and "clearlisting" is found later in this opinion. As will be seen, the "delay" in the issuance of clearlist statements regarding appellants' lease applications resulted from events which were unknown to the party issuing the notice at the time and was because a study of the area had to be conducted before any "clearlist" determination could be issued. This study was of the expansion of the Glass Mountain KGRA. Had there been no delay in the conduct of this study, the outcome would not have been different. Those leases that were issued would have been issued and those applications that were denied would have been denied.

In support of their contention that the lease documents sent to appellants became binding contracts at the time of execution by appellants, they advance the theory that the noncompetitive geothermal leasing system is comparable to the competitive oil and gas leasing system. The basis for this contention is the argument that there is no specific language that a lease offer is not binding on the Government until executed on behalf of the Government in the geothermal regulations while there is such language in the oil and gas regulations. This argument completely ignores the basic underlying similarities. Both the oil and gas and the geothermal leasing system are two tiered. Both provide for over-the-counter filing in those areas where there is no known resource (known geological structure (KGS) in the case of oil and gas and KGRA in the case of geothermal resources). In both cases, if there is a known structure the land can only be leased through the competitive system. It is, therefore, imperative in both cases that prior to the issuance of a noncompetitive lease, a determination be made that the land is not in the KGS or KGRA. This determination is the last one made prior to issuance of the lease. Therefore, as is the case with oil and gas, the authorized representative must have the ability to deny issuance of a lease up until the time that he executes it on behalf of the Government. Without this authority he is put in jeopardy of execution of a lease which is contrary to the statutory law governing lease issuance. Therefore, it is the parallelism between the statutory provisions regarding issuance of the leases

and the similar requirements regarding the issuance of leases in an area known to contain the resource that must be examined, not the lack of similar regulatory language regarding the effective date of the leases. The only logical determination is that, like oil and gas leases, noncompetitive geothermal resources leases are effective only on execution by the duly authorized BLM representative.

Appellants also argue that BLM should be estopped from denying issuance of the leases, citing United States v. Georgia-Pacific Co., supra at 96. The court in Georgia-Pacific Co. outlined four elements necessary for imposition of estoppel:

> (1) The party to be estopped must know the facts; (2) he must intend that his conduct shall be acted on or must so act that the party asserting the estoppel has a right to believe it is so intended; (3) the latter must be ignorant of the true facts; and (4) he must rely on the former's conduct to his injury.

Several factors preclude the imposition of estoppel in these cases. Appellants have not established that there was a Departmental policy or practice of issuance of the noncompetitive leases after issuance of a notice of intent, even though the lessee may subsequently be found not to qualify, or the lands may subsequently be found to be within a KGRA. Appellants have not demonstrated that they were ignorant of the true facts that no lease would be binding on the Government unless and until executed by the authorized representative. In fact, their statement that under normal circumstances, the lease is not effective unless and until executed on behalf of the Government belies this contention of reasonable reliance. Appellants were not ignorant of the fact that, if at any time prior to issuance of the lease, the lands were determined to be within a KGRA, the leases would be denied. The true facts are that the Government has consistently rejected noncompetitive lease applications if the requirements of the Act and regulations are not met. We note that no noncompetitive geothermal leases were issued within the expanded Glass Mountain KGRA subsequent to January 1983.

Finally, we do not believe that any doctrine of fairness dictates another result. Under section 3 of the Geothermal Steam Act of 1970, 30 U.S.C. § 1002 (1982), the Secretary has the discretionary authority to issue geothermal resources leases and, therefore, has like authority to reject lease applications up until issuance of the leases. In particular, we note that the notices of intention to award leases were expressly subject to the condition that the land not be included within a KGRA. An applicant cannot be said to have reasonably relied on such an uncertainty when it received the notice of intention to award a lease, subject to the very condition which later barred issuance.

Having reviewed the evidence before us, we conclude that Quadra has provided no evidence that BLM intended to discriminate against Alaskan and other applicants or to favor certain applicants. Quadra's characterization of the evidence is designed to demonstrate a pattern of discrimination. This allegation rests in large part on Quadra's contention that BLM improperly delayed the processing of Alaskan's lease applications and not the applications of other applicants. The facts do not support a determination that there was discriminatory treatment.

The 19 lease applications filed by Alaskan on June 27, 1974, and June 30, 1975, were for lands within the Modoc National Forest. Pursuant to the requirements in section 15(b) of the Act, 30 U.S.C. § 1014(b) (1982), and 43 CFR 3200.0-6, the applications were sent to the Forest Service, U.S. Department of Agriculture, for environmental review. 9/ On August 3 and November 23, 1981, the Forest Service transmitted its environmental reports with respect to these and other lease applications. Numerous applications were sent to the Forest Service between 1974 and 1981. However, no leases were issued during this period as the Forest Service did not respond to any of these requests by issuance of an environmental report until Aug. 31, 1981. Subsequent to that date the Forest Service responses were more timely. On March 4, 1982, BLM received a letter from the California Franchise Tax Board stating that California Geothermal, Inc. (now Alaskan), had been suspended from doing business in California, effective September 1, 1978. By decision dated March 29, 1982, BLM held that California Geothermal, Inc., was not qualified to hold Federal geothermal resources leases and directed California Geothermal, Inc., to submit evidence that it was in good standing in the State of California within 30 days of receipt of the March 29 decision. On April 21, 1982, California Geothermal, Inc., submitted evidence indicating that its name had been changed to Alaskan Geothermal, Inc. On May 4, 1982, BLM sent new corporate qualification forms to Alaskan for execution. The required forms were returned to BLM on June 8, 1982. By memorandum dated July 1, 1982, BLM requested the Regional Solicitor to give its opinion whether Alaskan was entitled to receive Federal geothermal resources leases. The Field Solicitor responded by memorandum dated July 28, 1982, indicating that Alaskan was so entitled.

BLM issued its notices of intention to award leases on August 17 and 27, 1982, pursuant to Instruction Memorandum (IM) No. 82-553, from the Director, BLM, instructing BLM state offices to inform lease applicants in such notices that leases would be awarded in order to allow applicants an opportunity to adjust their acreage holdings to conform to certain limitations. Alaskan's leases were tentatively scheduled to be awarded February 21 and March 1, 1983, all else being in order. However, on August 30, 1982, California Energy Company, Inc. (California Energy), filed a protest against issuance of the leases to Alaskan, contending that Alaskan had lost its priority by virtue of the hiatus in its corporate standing. BLM dismissed the protest by decision dated September 27, 1983. This decision was appealed by California Energy and was affirmed on appeal by this Board on January 24, 1983. See California Energy Co., 70 IBLA 221 (1983). 10/ On January 25, 1983, the Director, BLM, issued IM No. 82-553, Change 1, which directed BLM state offices "not to offer any geothermal leases, unless specifically requested by an applicant." IM No. 82-553, Change 2, dated March 7, 1983, continued the delay in offering geothermal leases "until July 30, 1983, for those lessees requiring additional time to make assignments, enter into unit agreements, or relinquish leases," in order to comply with acreage limitations. Quadra first inquired about Alaskan's lease applications by letter dated March 21, 1983. Quadra requested issuance of the leases by letter dated April 20, 1983.

9/ The 1974 applications were forwarded to the Forest Service between Dec. 23, 1974, and Feb. 7, 1975. The 1975 applications were forwarded on Dec. 16, 1975.

10/ Application CA-2136, CA-2139, and CA-2150 were involved in that appeal.

On April 19 and 22, 1983, BLM requested clearance by the Forest Service that 16 lease applications of Alaskan were not within certain wilderness areas where leasing was prohibited, in accordance with IM No. 83-120, dated November 22, 1982. Clearances were issued April 25 and May 24, 1983. The requests for clearance of three 1974/1975 lease applications were delayed by the appeal in the Caithness Corp., 72 IBLA 350 (1983), until May 31 and June 30, 1983. 11/ Clearances were issued June 10 and July 11, 1983.

In December 1982, BLM learned of promising results from drilling on existing geothermal leases. This information was confirmed by data filed pursuant to lease terms in February 1983. As a result, BLM commenced compiling data in preparation for a further study of the advisability of expansion of the KGRA. In May of 1983, a committee was formed for the purpose of reviewing known data and determining the exterior boundaries of the Glass Mountain KGRA.

Prior to December 3, 1982, BLM had, as a last step prior to the issuance of geothermal leases, sent notification of its intent to issue a lease to the Menlo Park Office of the Minerals Management Service (MMS) and requested that MMS "clearlist" the lands as not being within a KGRA. In December 1972, the Secretary of the Interior transferred this function to BLM. See 48 FR 8983 (Mar. 2, 1983). As a result, in March 1983, the function of clearlisting, previously in MMS, was assumed by BLM. This function was delegated to the District Office by the State Director in order that, once the transfer of MMS files and personnel was completed, the processing of clearlisting applications could be accelerated. However, performance of this function was necessarily delayed until the MMS files and employees could be relocated to the respective district offices. As a result, a clearlist determination could not be completed until July 1983. The committee met in July 1983 and, as a result, issued a report, dated July 28, 1983, finding that the Glass Mountain KGRA should be expanded. The affected pending lease applications were subsequently noted as being in the expanded KGRA and not clearlisted.

On August 3, 1983, BLM adopted minutes entitled "California Known Geothermal Resources Area Minutes No. 40 -- Redefinition by Addition to the Glass Mountain Known Geothermal Resources Area, Siskiyou County, California" (Minutes). The recommendation to expand the KGRA was approved by the District Manager, Susanville District, California, BLM, on August 29, 1983. Alaskan's lease applications were subsequently rejected.

We note that Quadra is correct in asserting that applicants who filed long after Alaskan received leases before Alaskan. However, there are two important factors which cause this apparent disparity of treatment to disappear on close examination. First, because of the delay caused by the Forest Service not issuing its report until August 3, 1981, or later, all

11/ When an appeal to the Board of Land Appeals from a decision made by an official of BLM is properly filed, that official loses jurisdiction over the case and has no further authority to take an action on the subject matter of the case until jurisdiction is restored by Board action disposing of the appeal. 43 CFR 4.21; Sierra Club, 57 IBLA 288 (1981); Warren D. Elmore, 42 IBLA 91 (1979).

applications filed before August 3, 1981, stood in approximately the same position until that date. Second, the other applications, unlike those of Alaskan, were not deficient or delayed by protests and/or appeals and, thus, leases were issued without postponement. Under the circumstances, we conclude that BLM did not deliberately delay the processing of Alaskan's lease applications, and Alaskan and the other appellants are not victims of discriminatory treatment. Moreover, there is no evidence that BLM considered the possibility of designating a KGRA extension until May 1983. Thus, until May 1983, there was no cause to believe that certain applicants would profit by prompt issuance of their leases and other applicants would be adversely affected by delay in the processing of their lease applications. 12/

Caithness and California Energy also contend that issuance of geothermal resources leases was mandated in their individual cases by certain directives. Caithness and California Energy argue that in late 1981 the Secretary in part instructed the Director, BLM, to process all pending noncompetitive geothermal resources leases with 12 months. However, BLM points out in its answer that the directive applied only to BLM lands and did not apply to Forest Service land, where BLM has "no control over the speed with which the U.S. Forest Service completes prelease environmental analyses or wilderness clearances." See also Larry E. Clark, 66 IBLA 23 (1982). Caithness argues that the Board in Caithness Corp., supra, vacated BLM decisions, dated November 24, and December 2, 1982, rejecting appellant's lease applications and, thus, determined that it was appropriate to issue leases. The Board, however, remanded the case to BLM for further adjudication consistent therewith and did not hold that appellant was entitled to a lease.

We now turn to the question of whether the affected land in appellants' lease applications was properly classified as within a KGRA extension. We note that the record contains a memorandum from the Deputy Minerals Manager, Resource Evaluation, MMS, to BLM, dated June 9, 1982, which concluded that certain areas to the south and west of the original Glass Mountain KGRA, covered by lease applications CA-12685 through CA-12695, should not be included in the KGRA:

> The subject lands are located on the lower flanks of the Medicine Lake Highland, west and south of the Glass Mountain KGRA, in the Klamath and Modoc National Forests. The Medicine Lake Highland is a shield volcano 1 km thick and 25 km in diameter, composed mostly of andesitic and basaltic flows. An 8 km by 6 km caldera, containing Medicine Lake at its west end, occurs at the

12/ In their statements of reasons, Caithness Corp. (Caithness) and California Energy also argue that BLM engaged in a pattern of discrimination, issuing certain leases and not others within the KGRA extension. However, appellants present no evidence that issuance of leases was the result of deliberate discrimination rather than the consequence of the processing of the various lease applications. We also note that Caithness and California Energy's lease applications were not filed until March, April, and June 1982. In his statement of reasons, Hunt also alludes to unexplained and inordinate delay in the processing of his lease application, but offers no evidence that BLM improperly delayed processing his application.

> summit of the shield and is flanked on the east and west by two prominent rhyolite domes (Glass Mountain and Little Glass Mountain) and associated flows. Young basalt cinder cones and associated flows occur on the northern and southern flanks of the highlands.
>
> The Medicine Lake Highland has been the site of volcanic activity during the past 1.5 to 2 million years. The rhyolitic rocks near the shield summit and the young basaltic cones and flows on the flanks may have erupted contemporaneously within the last 1100 years. However, except for a weak fumarole (Hot Spot) on the west side of Glass Mountain and a few small areas of hydrothermal alteration around Medicine Lake, there are no surface manifestations of a geothermal system in the area. If a geothermal system does exist, it is thought to be associated with the summit caldera within the Glass Mountain KGRA; there is little direct evidence for a geothermal system on the flanks of the shield.

In the Minutes, however, the evaluation committee recommended an addition of 100,918.26 acres to the Glass Mountain KGRA based on "Pleistocene to Holocene extrusive features, high temperatures in gradient wells (some wells are located near the former KGRA boundary and some are near young surface features), major lineaments, and gravity, resistivity, and seismic surveys," which indicate the presence of a 150 degree C. geothermal resource (Minutes at 4, 6). One hundred fifty degrees centigrade is generally regarded as the minimum temperature which would support commercial generation of electricity from a geothermal resource (Answer at 26-27 n.26). With respect to geophysical surveys, the Minutes state at page 3:

> The Bouquer Gravity anomaly maps of Chapman and Bishop (1968) did define a positive anomaly around Medicine Lake. Finn and Williams (in press) have gravity data which they indicate is sufficient to help define a shallow intrusion under Medicine Lake volcano.
>
> Stanley (1981) found a regional magnetotelluric (MT) anomaly at the KGRA. Subsequent proprietary MT studies refined the earlier results in portions of the area.
>
> Seismic studies have defined an intrusive body under Medicine Lake Highlands. Zucca et al (in press) have conducted a seismic refraction study which shows a high-velocity anomaly at depths between 1 and 20 km. The diameter of the anomaly is approximately 30 km (20 mi). Teleseismic relative travel-time residual studies by Evans (1982) ". . . reveal high-velocity anomalies in the crust and upper mantle extending from very shallow depths to at least 100 km beneath the volcano." H. M. Iyer (1983, oral comm.) thinks that the intrusion under Medicine Lake Highland is approximately 30 km in diameter, centered on a point 3 or 4 km north or northwest of Medicine Lake. Iyer's tentative conclusions for a reservoir boundary with temperatures sufficient to generate electricity coincide

> with our interpretation and with the interpretation of Donnelly-Nolan (1983, oral comm.), which is based on the surface volcanic expressions. [Emphasis added.]

With respect to exploration wells, the Minutes state, at page 4:

> Five temperature-gradient wells, that range in depth from 275m (900 ft) to 1220m (4000 ft), were then drilled in late 1982 by Union, Occidental Geothermal, Inc., and Phillips Petroleum Company. These wells were drilled within the Medicine Lake caldera or just outside the caldera's eastern rim. Bottomhole temperatures and average temperature-gradient calculations of all five wells show that temperatures of at least 150 degrees C can be economically reached with current drilling technology. Union is now drilling a sixth gradient well to the southwest of the caldera rim, and plans to drill a deep test well by summer 1984.

With respect to lineaments, the Minutes note two lineaments within the redesignated KGRA, which are believed by BLM to represent underlying fractures and intersect at some point within the KGRA. With respect to extrusive features dating from the Pleistocene and Holocene eras, the Minutes note that Holocene vents occur north, south, and southwest of the caldera within the original KGRA. Finally, the Minutes state that a "few sections of land" were added to the KGRA due to competitive interest, i.e., overlapping lease applications (43 CFR 3200.0-5(k)(3)), even though "the available geologic information alone is insufficient to include the lands within the KGRA" (Minutes at 7). 13/

KGRA determinations must be based on the evidentiary factors set forth in the Act and its implementing regulations, 43 CFR Part 3200. Hydrothermal Energy & Minerals, Inc., supra. Moreover, BLM (formerly MMS) is the secretary's technical expert in matters concerning the geologic evaluation of tracts of land and the Secretary is entitled to rely upon its reasoned analysis. Suzanne Walsh, 75 IBLA 247 (1983). An applicant who challenges a determination that certain land is situated within a KGRA has the burden of demonstrating by a preponderance of the evidence that the determination is in error. Earth Power Corp., 29 IBLA 37 (1977); see Harry S. Hills, 71 IBLA 302 (1983).

In its statement of reasons for appeal, Quadra contends that the KGRA determination is not adequately supported and is in error. In particular, Quadra argues that the evidence which the evaluation committee relied upon in designating the KGRA extension is no different from that which was used to designate the original KGRA in 1970 and 1975 (SOR at 10). The Minutes, however, belie this argument. They indicate reliance on subsequent well test results, geophysical surveys, and exploration. In particular, the data from the five completed wells was first submitted to BLM in February 1983 (Answer at 27). Moreover, old geological data may properly be reevaluated in a KGRTA

13/ Quadra cites the latter statement as proof that the evaluation committee considered the geologic information insufficient as to the whole of the KGRA extension (SOR at 10). However, we believe that the statement was clearly intended to be applicable to only a "few sections of land."

determination. Nancy J. Moffitt (On Reconsideration), supra. Quadra also notes that in 1982 when BLM issued noncompetitive leases within land later designated as within the KGRA extension this evidence was available. However, until formation of the evaluation committee, the evidence was not subjected to competent and orderly review. Quadra argues that, at the time of issuance of the noncompetitive leases, the evidence "was then considered insufficient to justify an expansion" of the KGRA (SOR at 13). There is no indication in the record that such evidence was considered at that time. Compare Letter from Deputy Minerals Manager, Resource Evaluation, MMS, to BLM, dated June 9, 1982, with Minutes. Moreover, certain evidence, particularly the exploration well data, was not available at that time.

Quadra also argues that the evaluation committee did not disclose its interpretation of the data set forth in the Minutes. We disagree. The Minutes clearly indicate the various factors which the committee believes point to the presence of a geothermal resource underlying the KGRA extension. Indeed, Quadra takes exception to the association between such factors and the resource.

With respect to fracture zones, Quadra states that, while they constitute a potential permeable reservoir structure, they are not necessarily associated with the presence of geothermal resources. In its answer, at pages 36-37, BLM states that the lineaments were essentially used as indications of the boundaries of an intermediate geothermal resource. Similarly, Quadra argues that geophysical anomalies are not necessarily associated with the presence of geothermal resources. Quadra also argues that the magnetotelluric survey method used by Stanley is an experimental and controversial survey method. We note, however, that the Department may use telluric survey methods in KGRA determinations, presumably including magnetotelluric. See 43 CFR 3200.0-5(k)(1). Quadra also argues that the redesignated KGRA does not include one-fourth of the postulated 30 kilometer-diameter intrusion identified by Iyer. However, this argument suggests that the KGRA should be further expanded rather than contracted, as urged by Quadra. Otherwise, the intrusion appears to include the KGRA extension. With respect to the data from the exploration wells, Quadra states that the higher temperature gradients were recorded in the eastern part of the original KGRA but that the evaluation committee expanded the KGRA boundary approximately 8 miles west, 7 miles north, and 7 miles south of well 56-3, which only recorded an average temperature gradient of 88.4 degrees C/km.

We conclude that the most persuasive evidence of the presence of geothermal resources within the KGRA extension is the 30 kilometer-diameter intrusion and the results of the five exploration wells which indicate the existence of 150 degrees C. geothermal resources at depths which can be economically reached. While each of the factors cited in the Minutes may not be significant, taken together they provide sufficient evidence to support a KGRA determination. See Nancy J. Moffitt (On Reconsideration), supra. This combination of factors, including the areas of competitive interest, is graphically depicted on the map of the redesignated KGRA (BLM Exh. AA). This map demonstrates the convergence of various factors. Quadra does not rebut the KGRA determination based on the combination of factors. 14/

14/ Hunt also challenges inclusion of the remainder of his noncompetitive lease application (CA 2424), i.e., the N 1/2 and SE 1/4 sec. 15, T. 44 N.,

Accordingly, we conclude that the record demonstrates sufficient evidence to support a determination that the land within the KGRA extension is an area which would "engender a belief in men who are experienced in the subject matter that the prospects for extraction of geothermal steam or associated geothermal resources are good enough to warrant expenditures of money for that purpose." 30 U.S.C. § 1001(e) (1976); Earth Power Corp., supra; Anadarko Production Co., supra. Appellants have not made a showing by a preponderance of the evidence that there was error in the KGRA determination.

Appellants have also requested a hearing pursuant to 43 CFR 4.415. A hearing will be ordered only where an appellant presents probative evidence contravening a KGRA determination sufficient to raise an issue of material fact such that a hearing might be productive of a different result. Celeste C. Grynberg, 74 IBLA 180 (1983); KernCo Drilling Co., 71 IBLA 53 (1983). Appellants have not submitted sufficient probative evidence indicating that a hearing might be productive. Therefore, the request for a hearing is denied.

Appellants have submitted numerous allegations of fact and law in the various statements of reasons, supplemental statements of reasons and responses which have been considered by this Board. Except to the extent that they have been expressly or impliedly affirmed by this decision, they are rejected on the ground that they are, in whole or in part, contrary to the facts and law or that they are immaterial.

Pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decisions appealed from are affirmed.

R. W. Mullen
Administrative Judge

We concur:

Franklin D. Arness
Administrative Judge

Gail M. Frazier
Administrative Judge

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fn. 14 (continued)
R. 4 E., Mount Diablo meridian, California, within the KGRA extension. However, Hunt focuses on the fact that sec. 15 falls outside the eastern lineament and ignores the other geologic and geophysical data considered by the evaluation committee.

APPENDIX A

IBLA Filed	Appellant	Application No.	Application Date of BLM Decision	Application No.	Application Date of BLM Decision
84-71	Quadra Geothermal, Inc.	CA-14290	7/1/83	9/23/83	
84-72	Eugene V. Ciancanelli	CA-12598	4/1/82	9/20/83	
84-86	Caithness Corp.	CA-12402	3/1/82	9/23/83	
		CA-12592	4/1/82	9/23/83	
		CA-12593	4/1/82	9/20/83	
		CA-12594	4/1/82	9/20/83	
84-87	California Energy Co., Inc.	CA-12777	6/1/82	9/20/83	
84-96	Robert B. Bunn	CA-1215	1/31/74	9/20/83	
		CA-12685	5/3/82	9/20/83	
		CA-13113	9/1/82	9/16/83	
84-97	Gina V. Gillette	CA-12686	5/3/82	9/20/83	
		CA-12687	5/3/82	9/19/83	
		CA-12688	5/3/82	9/23/83	
		CA-12689	5/3/82	9/20/83	
		CA-12690	5/3/82	9/20/83	
		CA-12691	5/3/82	9/20/83	
84-98	Alexander C. McGilvray	CA-12600	4/1/82	9/23/83	
84-120	Robert B. Davis Edward S. Davis	CA-5022	4/3/78	9/23/83	
84-174	Quadra Geothermal, Inc.	CA-2136	6/27/74	9/21/83	
		CA-2139	6/27/74	9/21/83	
		CA-2140	6/27/74	10/3/83	
		CA-2142	6/27/74	10/3/83	
		CA-2143	6/27/74	9/23/83	
		CA-2145	6/27/74	10/3/83	
		CA-2146	6/27/74	10/3/83	
		CA-2147	6/27/74	10/3/83	
		CA-2150	6/27/74	9/16/83	
		CA-2151	6/27/74	10/3/83	
		CA-2152	6/27/74	9/23/83	
		CA-2156	6/27/74	9/20/83	
		CA-2157	6/27/74	9/20/83	
		CA-2160	6/27/74	9/21/83	
		CA-3079	6/30/75	9/16/83	
		CA-3081	6/30/75	9/20/83	
		CA-3084	6/30/75	9/21/83	
		CA-3085	6/30/75	10/3/83	
		CA-3086	6/30/75	9/20/83	
84-188	Thomas M. Hunt	CA-2424	10/25/74	10/31/83	

IBLA No.	Appellant	Total Acreage	Acreage within KGRA
84-71	Quadra Geothermal, Inc.	1,900.22	629.62
84-72	Eugene V. Ciancanelli	1,280	1,280
84-86	Caithness Corp.	1,240	597.78
		2,520	*
		760.96	760.96
		1,120	1,120
84-87	California Energy Co., Inc.	639.84	639.84
84-96	Robert B. Bunn	2,280.28	2,280.28
		1,280.39	1,280.39
		639.84	639.84
84-97	Gina V. Gillette	640	640
		1,240	1,240
		2,506.66	586.66
		640	640
		640.86	640.86
		1,281.44	1,281.44
84-98	Alexander C. McGilvray	**706	706
84-120	Robert B. Davis Edward S. Davis	1,867.56	642.6
84-174	Quadra Geothermal, Inc.	1,875.22	520
		2,360.64	1,080.64
		1,925.87	1,285.87
		1,868.72	1,228.12
		1,920	1,920
		1,864.4	1,224.4
		2,560.51	1,280
		2,481.2	1,841.1
		***664	664
		2,075	1,435
		1,920	1,920
		1,920.15	1,920.15
		1,280.66	1,280.66
		1,917	1,917
		640	640
		1,295	1,295
		2,028	1,332
		1,920	1,280
		2,042	2,042
84-188	Thomas M. Hunt	2,385.8	**** 480

* Geothermal resources lease application CA-12592 was rejected in its entirety because a portion of the land was situated within a KGRA and the remainder had already been leased, effective Oct. 1, 1982, pursuant to noncompetitive geothermal resources leases CA-2127 and CA-2128. Appellant has not questioned rejection of the application for lease of land already leased.

** By letter dated May 13, 1982, appellant withdrew a portion of the acreage originally included in his geothermal resources lease application. *** By decision dated Dec. 24, 1975, BLM rejected geothermal resources lease application CA 2150 in part because the land was situated within an extension to the Glass Mountain KGRA, effective February 1974. No appeal was taken from that decision, which was, therefore, final for the Department.

**** By order dated Mar. 8, 1984, the Board granted a motion by BLM to partially remand the appeal docketed as IBLA 84-188 with respect to 640 acres of land situated in sec. 12, T. 44 N., R. 4 E., Mount Diablo meridian, California, because that land was not within the Aug. 3, 1983, extension of the Glass Mountain KGRA. We granted the motion in order to permit BLM to amend its October 1983 decision, which had originally rejected appellant's lease application as to that land.